

## DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS 441 G STREET NW WASHINGTON, D.C. 20314-1000

CECW-P/CECW-E

JUN 2 3 2006

## MEMORANDUM FOR ALL MAJOR SUBORDINATE COMMANDS

SUBJECT: Guidance on Levee Certification for the National Flood Insurance Program – FEMA Map Modernization Program Issues

## References:

- a. Federal Emergency Management Agency Memorandum, "Procedural Memorandum 34 Interim Guidance for Studies Including Levees," August 22, 2005.
  - b. 44 Code of Federal Regulations Chapter I, Subchapter B, Part 65.
- c. Engineer Regulation 105-2-101, "Risk Analysis for Flood Damage Reduction Studies," January 3, 2006.
- d. Director of Civil Works Memorandum "Guidance on Levee Certification for the National Flood Insurance Program," April 10, 1997.
- 1. The Federal Emergency Management Agency (FEMA) has embarked upon a major program to modernize the nations' floodplain maps. Through this program, commonly referred to as the Map Modernization (MapMod) Program, FEMA will provide the nation with digital flood hazard data and maps that are more accurate, easy to use, and readily available. The MapMod Program is described in detail at <a href="http://www.fema.gov/fhm/mm\_main.shtm">http://www.fema.gov/fhm/mm\_main.shtm</a>. USACE MSC and district offices are encouraged to develop partnerships with their counterpart FEMA MapMod colleagues to foster close coordination and collaboration on map issues of mutual interest.
- 2. On August 22, 2005, FEMA issued "Procedure Memorandum 34 Interim Guidance for Studies Including Levees". See Ref. 1a (Attachment 1). The key element of this memorandum is that if local governments wish areas behind levees to be shown on FEMA's new Digital Flood Insurance Rate Maps (DFIRMs) as protected to at least the one percent chance of flood using FEMA's guidance on levee certification, they must arrange for certification documentation to be provided to FEMA. Reference 1b includes FEMA's published guidance for levee certification. See Attachment 2. As a consequence, we expect local governments to seek certification documentation for levees within their jurisdiction from USACE offices. The purpose of this memorandum is to provide guidance on the appropriate handling of these requests.
- 3. USACE adopted risk analysis as the methodology for flood damage reduction studies. See Ref. 1c (Attachment 3). Subsequent to USACE adoption of the risk analysis for flood studies in 1996, USACE and FEMA agreed upon guidance for levee

certification that is founded on risk analysis as defined in ER 1105-2-101. The agreement is documented in the transmittal memorandum and guidance dated 10 April 1997 "Guidance on Levee Certification for the National Flood Insurance Program." See Attachment 4. The 1997 memorandum and guidance supplements the FEMA Code of Federal Regulation criteria for freeboard by providing upper and lower bounds of required levee performance based on specified levels of assurance of protecting against the base flood. The level of assurance performance of the levee of interest is determined by performing a risk and uncertainty analysis. The guidance requires risk analysis as the basis for all riverine and coastal levee and floodwall certification determinations performed by USACE.

- 4. Corps offices will not perform levee certifications for levees USACE did not construct, unless the levees participate in USACE's Rehabilitation and Inspection Program described in ER 500-1-1.
- 5. USACE will not certify a levee without, as a minimum, an on-site inspection by engineering technical staff. All inspection and certification work shall be performed by registered professional engineers. For levee systems that have been constructed within the past five years, and for which certification documentation is available, it is appropriate to briefly review the status of the levee system, verify via on-site inspections that the circumstances reflected in the published certification documentation continues to be appropriate, such as review of annual maintenance records, and re-issue a certification letter to FEMA. For levee systems that have recently undergone studies, or are in the active study phase but certification documents have not been prepared and processed, and provided timing and thoroughness of studies will support such, a certification determination can be made based on an on-site inspection and the guidance provided in the edited 10 April 1997 memorandum.
- 6. Final levee certification letters should be signed and submitted to the requesting local government with appropriate supporting documentation by the Chief of Engineering of the district office making the determination.
- 7. Funding guidance for levee certification activities described in this memorandum is expected to be issued in approximately 30 days.
- 8. Points of contact for this guidance are Mr. Eric Halpin, CECW-CE, telephone (202) 761-7775, Mr. Steve Durrett, CECW-CE, telephone (202) 761-5346 or Mr. Harry Kitch, CECW-CP, telephone (202) 761-4127.

FOR THE COMMANDER

DON T. RILEY

Major General, USA Director of Civil Works

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